IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	10/608,898	Confirmation No. 7789
Applicant	:	William A. Groll	
Filed	:	June 27, 2003	
Title	:	Bonded Metal Components Having Uniform Thermal Conductivity Characteristics and Method of Making Same	
Group Art Unit	:	1775	
Examiner	:	John J. Zimmerman	
Customer No.	:	28289	

Commissioner for Patents
P.O. Box 1450
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DECLARATION OF WILLIAM A. GROLL UNDER 37 C.F.R. §1.132

I, William A. Groll, hereby declare and say as follows.

1. I am the named inventor of the invention disclosed and claimed in the above-identified patent application. I am employed by All-Clad Metalcrafters LLC, the assignee of the subject application, and hold the title of Vice President Technical Services.

2. I was awarded a degree of Bachelor of Science in Mechanical Engineering from Point Park College and have over 25 years of experience in metal bonding in the manufacture and forming of multi-layer composite metal cookware and related products and have gained invaluable experience in this field by working many years with the late John Ulam, a pioneer in metal bonding technology.

3. I have carefully studied the disclosure of United States Patent No. 3,340,597 dated September 12, 1967, to Stein et al. (hereinafter referred to as "Stein"). I have also studied the Office Action of September 10, 2004, in which the Stein patent was cited as anticipating claims 1, 4, 6-7 and 13-15, and as rendering obvious claims 12 and 16-17 in view of applicant's disclosure of the prior art.

4. The Examiner has relied upon Example 4 of Stein as a basis for rejecting claims 1, 4, 6-7 and 13-15 under 35 U.S.C. §102(b). A careful review of all of the Examples 1-5 of Stein would lead a person skilled in the art, such as myself, to the conclusion that Example 4 is not intended for the manufacture of cookware. I reach this conclusion based on several reasons, including:

(a) Composite Sheet Size

I note that Example Nos. 2 and 3 both used a square composite sheet measuring 12" x 12" (col. 4, line 46 and col. 4, line 63 of Stein) which was formed into a cooking pan by drawing (col. 4, line 57 and col. 5, line 2 of Stein). Example Nos. 1, 4 and 5 of Stein all used a rectangular composite sheet measuring 4" x 8" which could hardly be drawn into a round shape cooking pan, unless the pan had a diameter of 2" to 3", which is very unlikely.

(b) Amount of Reduction of the Stainless Steel

In Example Nos. 2 and 3 where cooking pans were drawn subsequent to roll bonding the composite sheets, the stainless steel was reduced 13% and 6%, respectively, see col. 4, line 56 and line 75 of Stein. This may be contrasted with Example No. 4 wherein the stainless steel was reduced 21% in thickness during rolling, see col. 5, line 19 of Stein. The high degree of reduction of the stainless steel during rolling in Example No. 4 leads me to conclude that the composite material of Example No. 4 was not intended for subsequent drawing into a cooking pan. The additional deformation caused by drawing would cause the stainless steel to rupture.

5. As one skilled in the relevant art, I do not read Example No. 4 of Stein as teaching the manufacture of cookware based, in part, on the rectangular shape and size of the composite (4" x 8") and the high reduction (21%) during rolling, as discussed above in Paragraph No. 4. In addition, Stein specifically discloses in col. 2, lines 36-41, his idea of what stainless steel-bonded aluminum cookware should be:

> "In connection with cooking utensils, such as pans, it permits employing the stainless steel on the cooking side of the vessel, while simultaneously allowing utilization of the heat transmission qualities of the aluminum on the heating or fore side of the pan." (Emphasis added)

In this regard, I note that in Example Nos. 2 and 3 of Stein, the stainless steel layer is employed on the cooking side of a drawn pan, meeting his criteria for cookware, while in Example No. 4,

layers of aluminum are on the outside surfaces of the composite, which does not meet his criteria for cooking utensils where stainless steel should be employed on the cooking surface of the vessel.

6. Based on my reading of Stein, and as discussed in Paragraph Nos. 4 and 5 above, it is clear to me that the composite disclosed in Example No. 4 could not successfully be drawn into a cooking vessel, nor is it intended to be used in cookware based on Stein's own teaching at col. 2, lines 37-41, which calls for a stainless steel layer on the cooking side, which is not present in Example No. 4.

7. As a person skilled in this art, it is my opinion that Stein's Example No. 4 is directed to a composite of stainless steel-bonded aluminum intended for some use enumerated by Stein at col. 2, lines 34-36, such as automotive trim and the like, and not cookware. Stein does not disclose or suggest the concept of the present invention, namely, to employ a metal of lower thermal conductivity between layers of metal of higher thermal conductivity in cookware so as to create a thermal barrier layer within the interior of the cookware, whereby, heat flows in a direction parallel to the cook surface to provide uniform heating across the cook surface. The inventive concept of employing a thermal barrier layer in cookware is totally absent from Stein. Accordingly, in my opinion, Stein does not anticipate or render the present invention obvious.

This Declaration represents my good faith professional opinion. I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed Name: William A Groll

Typed Name: William A. Groll

Date: 1/7/05